SPECIAL SEVERE WEATHER RESPONSE REPORT

WEATHER SERVICE ARKANSAS
TORNADO WARNINGS DEMONSTRATE
MODERNIZATION BENEFITS;
TIMELY WARNINGS OF FAST MOVING
TORNADOES IN ARKANSAS RECOGNIZED
IN LITTLE ROCK PRESS

Accurate advance warnings of pending danger by the National Weather Service (NWS) during the devastating tornadoes that hit Arkansas on March 1st have drawn favorable recognition by the Arkansas Democrat-Gazette. At least 24 people were killed and 200 hospitalized and more than 100 houses destroyed by the twisters. Major property damage occurred in Arkadelphia, Sardis, and the Little Rock area. President Clinton toured the most severely damaged areas of the state on March 4th. Using Next Generation Doppler radar, the NWS Little Rock Forecast Office was able to issue warnings between 15 and 32 minutes before the deadly twisters touched down. Paul Greenberg, a nationally recognized columnist for the Democrat-Gazette, said "Radio and television gave the exact times each city, town, village and county could expect the storm to hit. It sounded like a bus schedule, and the storm kept to it exactly. Hospitals were alerted, nurses and doctors were ready, police and firefighters and the National Guard were soon on the scene. The state's new emergency broadcast system seems to have worked just the way it was supposed to." NOAA's Office of Legislative Affairs provided information to Hill staff on the Arkansas tornadoes and other severe weather that hit the mid-South and Midwest during the period.

NEXT GENERATION RADAR ALSO ACCURATELY PREDICTS RECENT OHIO VALLEY AND MID-SOUTH RIVER AND STREAM FLOODING SAVINGS HUNDREDS OF MILLIONS OF DOLLARS IN DAMAGE

By Barry Reichenbaugh, NOAA Public Affairs

River and stream flooding beginning February 28th affecting the Ohio River Basin, Mississippi and Missouri Rivers, and Tennessee River Basin are the latest events which have already made 1997 a busy year for floods. According to the National Weather Service (NWS) field office reports, record crests were observed on the Licking and Little Sandy Rivers in Kentucky, and on the lower portion of the Little Kanawha River in

West Virginia. Levels on the Licking River at Falmouth, Kentucky, were estimated at 7.2 meters above flood stage, exceeding the old record by 1.5 meters (close to a 500-year return period). Water in these tributaries drained into the Ohio River, driving it to levels not seen in 30 years.

As early as Friday evening, Feb. 28th, NWS fore-cast offices in Cleveland and Wilmington, Ohio, issued flood potential outlooks warning of the likelihood of flooding over the weekend. These were followed by flash flood and river flood warnings. As the situation unfolded rapidly, WSR-88D radars proved invaluable in identifying the intensity of the rain and areas where flooding was most likely, said Frank Richards, chief of the NWS Hydrologic Information Center in Silver Spring, MD.

With reports still coming in, at least 26 deaths were attributed to this flooding. "In many cases the loss of life was preventable," said Richards. "Many people perished in vehicles. Most or all of these fatalities occurred in areas that were under flash flood and/or flood warnings."

It will take some time to assess the impact of flood damages, but they could ultimately amount to over one billion dollars, said Sol Summer, chief of the hydrologic services division in NWS Eastern Region. "NWS river forecasts, especially on the Ohio River, were provided with sufficient lead time to allow flood preparations that could well save millions of dollars in damage," Summer said.

Upper Midwest Flooding Predicted

On March 18th NWS announced its annual Spring Flood Outlook for the nation. "The Red River of the North in North Dakota and Minnesota and the James River in South Dakota could see record flooding, said Richards. "Snow cover in this area has unusually high water content. In addition. flooding is forecast to be widespread in the eastern Dakotas, southern portions of Minnesota and Wisconsin, and northern Iowa. As a result of inflow from so many tributaries, minor to moderate flooding is a virtual certainty on the lower Missouri and on the Mississippi rivers." To the west, there is also considerable concern for spring flooding in the northern and central Rocky Mountains, particularly in Idaho and parts of Montana, Wyoming, Utah, and Colorado, as snowpack totals are significantly above average. Locations of the lower Milk River in northeast Montana are expected to reach record levels. Much of Washington and northern Oregon are in jeopardy of spring flooding. (Article continued on page 14)



NOAA LEGISLATIVE HAPPENINGS

NOAA'S BUDGET REQUEST

The President's Request for NOAA for Fiscal Year 1998 is \$2.051 billion in new budget authority. This is an increase of \$78.5 million or 4 percent over the FY 1997 enacted level. In this period of high competition for discretionary funds, the President's FY 1998 budget request for NOAA affirms the importance of the agency's role by providing the resources to maintain essential services, facilitate continuing progress in critical investment areas, and address statutory obligations. NOAA's budget request is predicated on the need to ensure the continued delivery of essential science, technology and services to the Nation.

We are proposing \$172.5 million in program reductions and terminations in programs which are ending or of a lower priority. This includes \$65 million in the current series of polar satellites and \$31 million in completed construction projects. This allows us to strengthen the Administration's commitment to sustaining investments in science and technology and environmental protection. Compared with FY 1997, significant changes in the FY 1998 budget include:

The transfer, over the next two years, of the responsibility for **aeronautical charting** to the Department of Transportation or the Federal Aviation Administration (FAA) (\$14.5 million in FY 1998, 379 Full Time Equivalent personnel positions (FTEs) in FY 1999. Employees will be treated as reimbursable in FY 1998.)

+\$66.2 million for continuing **Geostationary Weather Satellite** development and acquisition; and +\$22.5 million to converge civilian and military **Polar-orbiting Satellites**.

+\$22 million for NOAA's participation in the **President's** Clean Water Initiative, including \$4 million for the Community-Right-To-Know Project on toxics, and \$18 million for state grants, technical assistance and demonstration projects to reduce toxic runoff into coastal waters under the Coastal Zone Management program.

+\$16.6 million to continue the President's commitment to restore the health and wealth of America's **fisheries** and protect species in danger of extinction.

+\$4.9 million to ensure an operating base for the Tropical Oceans-Global Atmosphere (**TOGA**) system critical to forecasting El Nino events and to the production of future climate forecasts.

+\$10.8 million for base restoration in the **National Weather Service** to maintain the critical mass necessary to operate infrastructure.

+\$16.9 million to proceed with the nationwide deployment of the Advanced Weather Interactive Processing System (AWIPS).

+\$6 million to fund costs of disestablishing the **NOAA Corps**.

NEW ACCOUNTS

The proposed new **Capital Assets Acquisition Account** includes requests for major acquisitions. Of the just more than \$2 billion FY 1998 NOAA request, \$503 million is included in the Capital Asset Acquisition Account. It will include funding for the current series of polar satellites, the Geostationary Operational Environmental Satellite (GOES) program, the Advanced Weather Interactive Processing System (AWIPS) program, the remainder of the deployment for Next Generation Radar (NEXRAD) and several major construction projects.

The President's budget also includes a request for advance appropriations of \$723 million in appropriations for these projects in FY 1999 and a specific amount for each through the completion of each of the projects funded in that account in FY 1998.

We believe that multi-year funding will provide the certainty to allow us to more effectively plan and manage these major acquisition projects. This will also allow us to spend more of our time with the Congress discussing our programmatic requirements. The Administration's goal for this effort is to ensure that capital assets support core/priority missions of the agency; the assets have clearly demonstrated a projected return on investment; cost-benefits of acquisition have been evaluated; and to help ensure accountability.

ADDITIONAL HIGHLIGHTS OF THE FY 1998 REQUEST

NATIONAL OCEAN SERVICE

-An increase of \$2.5 million is requested for NOAA's portion of the Administration's **South Florida** Interagency Ecosystem Restoration Initiative.

-An increase of \$0.8 million is requested for the Damage Assessment and Restoration Program (**DARP**) to enable NOAA to fulfill its public trusteeship responsibilities for coastal and marine resources.

-Continued support at \$15.2 million is requested for the **Coastal Ocean Program** to improve predictions in the areas of fisheries productivity, marine habitat and coastal flooding.

-An increase of \$1.5 million in **Coastal Zone Management** grants is requested for the addition of two new coastal states, Minnesota and Georgia.

-An increase of \$1.5 million is requested for the **National Marine Sanctuaries** to partially offset increases in base operations, enhance operations for sites below minimal operational levels, and provide some support for implementing final management plans — Hawaiian Islands Humpback Whale and Florida Keys sanctuaries.

- NOAA is requesting level funding for the **National Estuarine Research Reserves** (NERRS) at \$4.3 million. All funding is provided in the Operations, Research and Facilities (ORF) account. In FY 1997, \$3.0 million of this amount was made available within the Coastal Zone Management Fund (CZMF). Funding is no longer sufficient to level fund NERRS *Continued on page 3*

from the rapidly depleting CZMF.

NATIONAL MARINE FISHERIES SERVICE

-An increase of \$8.8 million is requested to implement new requirements in the recently reauthorized **Magnuson-Stevens** Act (PL 104-297). The Act, which was passed at the end of the 104th Congress, contains many new requirements including major revisions to all existing 39 Fishery Management Plans.

-A net increase of \$7.7 million is requested for **Protected Species Management** to develop and implement recovery and conservation plans for species currently listed as depleted, threatened, or endangered under the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). This includes \$6.7 million to address the salmon and steelhead listings along the West Coast.

OCEANIC AND ATMOSPHERIC RESEARCH

-An increase of \$1.0 million is requested for the **Health of the Atmosphere** program. This increase will enable NOAA to contribute to the Nation's first scientific air quality assessment, which will provide information needed to develop effective strategies for implementing the Clean Air Act and its amendments.

-A \$1.0 million increase is proposed in NOAA funding for the Global Observations to Benefit the Environment (**GLOBE**) program to support continued growth in the number of participating U.S. schools and the breadth of science data being collected for the international science community.

-A \$2.0 million increase is requested for the **Climate and Global Change** Program to continue activities of the International Research Institute (IRI) and operational climate forecasts, and improve seasonal-to-interannual climate modeling and prediction over North America through process research programs.

-The **Sea Grant** College Program has \$4.1 million in proposed reductions.

-A decrease of \$6.6 million is proposed for the National Undersea Research Program. The Administration supports the **NURP** program at the \$5.4 million level, which will allow for a streamlined, yet nationally competitive research program

NATIONAL WEATHER SERVICE (NWS)

-The request includes equipment and operational costs totaling \$4.9 million for mitigation activities recommended in the **Secretary's Team Report on Next Generation Radar (NEXRAD)** Coverage and Associated Degradation of Weather Services at 32 Areas of Concern.

-The Modernization and Associated Restructuring Demonstration Initiative (MARDI) program includes \$3.1 million in savings related to **streamlining certification** procedures required under the Weather Service Modernization Act (PL 102-567). NWS proposes to streamline the current process

and is transmitting a proposed amendment as part of the President's Budget.

-The \$2.2 million reduction in **NEXRAD** reflects the planned reduction in deployment costs as the national network nears completion.

-A total of \$5.3 million is requested in the Operations, Research and Facilities account to operate and maintain the NWS network of 320 Automated Surface Observing System (ASOS) units. The total ASOS program budget of \$9.8 million represents a \$0.2 million reduction from the FY 1997 to reflect the completion of the acquisition program.

CONSTRUCTION

-An increase of \$12.6 million is included for the architectural and engineering studies for construction of a new NOAA operations and research center at the **Goddard** Space Flight Center in Greenbelt, Maryland.

-An increase of \$15.2 million is included for the National Marine Fisheries Service Lab project at **Santa Cruz**, CA. The laboratory will replace the aging Tiburon (CA) Laboratory.

-NOAA requests a decrease of \$5.0 million for the cleanup of the **Pribilof Islands**, Alaska, ending the funding for this project, because the project is nearing completion.

-NOAA requests the decreases/terminations for a number of completed projects or Congressional earmarks: The Charleston Laboratory, \$5.0 million; Alaska Fisheries Center, \$6.0 million; Honolulu Laboratory, \$2.0 million; Newport Marine Science Center, \$3.5 million; National Estuarine Research Reserves facilities, \$1.0 million, and the New Hampshire Environmental Technology facility, \$8.5 million.

NOAA FLEET

The request for fleet maintenance and planning is \$11.8 million, an increase of \$3.8 million. This increase will provide for maintenance on existing ships, systems improvements to enhance hydrographic survey capability, and repairs to the fisheries research ship MILLER FREEMAN which operates primarily in Alaskan waters.

FOR A FULL SUMMARY OF THE PROPOSED NOAA Fis pal Year 1998 Budget call up the NOAA Legislative Affairs Homepage: Http://www.noaa.gov/noaa-ola

REP ABERCROMBIE OF HAWAII NAMED RANKING DEMOCRAT ON KEY NOAA AUTHORIZING SUBCOMMITTEE

The House Resources Committee on February 5th named Rep. Neil Abercrombie (D-HI) to replace former Rep. Gerry Studds (D-MA) as the ranking Democrat on the Fisheries, Wildlife and Oceans Subcommittee. The subcommittee is the major authorizing subcommittee for NOAA's fisheries and oceans programs. It is chaired by Rep. James Saxton (R-NJ). Rep. Abercrombie supported the original authorization for the Hawaiian Island Humpback Whale National Marine Sanctuary (HIWHNMS) and remains a strong advocate. He holds a doctorate in American Studies.

New subcommittee members named include freshman Rep. John E. Peterson (R-PA), a former grocer and state legislator, who represents the State College area in Central Pennsylvania. Another new Republican member is Rep. Michael Crapo (R-ID), who is interested and concerned about Endangered Species Act issues.

SEA GRANT LEGISLATION REFERRED TO HOUSE SCIENCE COMMITTEE AFTER REPORTED OUT OF RESOURCES COMMITTEE

The House Science Committee was poised to reauthorize a program that distributes funds to colleges and other qualified teaching institutions for ocean research. HR 437 would reauthorize the National Sea Grant College Program Act through 2000, with fiscal 1998 funding authorized at \$54.3 million; \$55.4 million in FY 1999; and \$56.5 million in FY 2000. The funding would be targeted for grants, contracts, and fellowships. It. was taken up by the House Science Subcommittee on Energy and Environment (Rep. Ken Calvert, R-CA) on March 13th. Both Reps. Vern Ehlers (R-MI) and Tim Roemer (D-IN) expressed interest in how zebra mussel research was funded. The measure would modify the duties of the Sea Grant College's director and would repeal the Sea Grant post-doctoral fellowship and international programs. It also provides authorization and funding for oyster-disease research. The law was established by Congress in 1966 to improve the nation's marine resource conservation efforts. The bill was reported out of the House Resources Committee (Rep. Don Young, R-AK) on March 5th.

SEN. BOXER INTRODUCES LEGISLATION TO MOVE OJAI (SULPHUR MOUNTAIN) RADAR

Sen. Barbara Boxer (D-CA) on February 24th introduced S 344, the Senate counterpart to House legislation to require the National Weather Service to move the controversial Ojai (Los Angeles/Santa Barbara area) Next Generation Radar tower. The bill was referred to the Senate Commerce, Science and Transportation Committee. Rep. Elton Gallegly (R-CA), who represents the district where the tower is located, has introduced HR 174. Both bills would require the tower to be moved within 18 months of enactment. The Sulphur Mountain site has been subject to intensive criticism from the Ventura County residents concerned about lowered property values, led by "Dallas" television star Larry Hagman. Opponents have unsuccessful tried to engage the courts claiming that radio frequency exposures would cause adverse health effects. NOAA has scientifically refuted those arguments. Sen. Boxer amended NOAA's FY '96 Appropriations bill to direct NOAA to look for alternative sites if funds were available for this kind of survey. NOAA later told Sen. Boxer's office that site survey funds were not available. NOAA concluded that the cost of moving the radar would be at least \$5.1 million.

REP. GILCHREST HOPES FOR SPEEDY ACTION ON TUNA/DOLPHIN LEGISLATION

Rep. Wayne Gilchrest (R-MD) has told the <u>Congressional</u> <u>Quarterly</u> that he hopes for speedy action on HR 408 which

he introduced on January 9th to support the International Dolphin Conservation Program in the Eastern Tropical Pacific Ocean. The so-called "dolphin-safe" legislation is similar to legislation which almost passed last session, but was blocked by Sen. Barbara Boxer (D-CA). HR 408 implements the Panama Declaration signed by the United States and eleven other nations. The article quotes the Maryland Republican as criticizing the Administration for not getting the House-passed bill through the Senate. This time, he said, supporters will make sure that the bill gets to the Senate floor long before end-of-session pressures begin. A hearing and a markup have been scheduled for April 9th and April 10th respectively before the House Resources Subcommittee on Fisheries, Wildlife and Oceans (Rep. James Saxton, R-NJ) (See related article on page 18)

The National Marine Fisheries Service has established a web site for implementation of the Magunson-Stevens Reauthorization Act. It has a copy of the revised act and a summary of ongoing activities: http://

kngfish.ssp.nmfs.gov/sfa/

NOAA OCEANIC HAPPENINGS

NOAA MOVES QUICKLY TO ASSESS IMPACTS OF SHIPGROUNDING IN THE FLORIDA KEYS SANCTUARY

A 185 meter foreign flag freighter ran aground on the coral reefs of the Florida Keys National Marine Sanctuary (FKNMS) on February 2nd. After remaining aground for 6 days the vessel was refloated from the reef without causing collateral damage to surrounding FKNMS resources or release of oil or other hazardous materials into the marine environment. A combined government response team coordinated by the U.S. Coast Guard Unified Command in Key West which includes NOAA and the State of Florida currently is investigating circumstances surrounding this event and potential enforcement and damage assessment legal actions.

Concerning the circumstances behind the grounding, the CONTSHIP HOUSTON, a Liberian owned and registered container vessel operated by the shipping line Transportacion Maritima Mexicana, ran aground in 6 meter deep waters approximately 9 nautical kilometers south of Saddle Bunch Key, between Maryland and American Shoals near Key West, FL. Not only are these waters within the FKNMS, they are also included in a congressionally mandated "Area to be Avoided (ATBA)" for all vessels over 45 meters in length. The ship was en route to Valencia, Spain from New Orleans at the time of the grounding. The double-hull construction of the vessel minimized the threat of release of approximately 3 million liters of a combination of heavy fuel, diesel and lube oils for its own use, and fortunately, the Coast Guard determined that there was no actual oil pollution present at the site.

Nonetheless, sanctuary resources were severely damaged by the grounding, particularly ancient spur and groove coral reefs as made evident during overflights and preliminary un-

derwater dive surveys. The approach track of the vessel and actual grounding site, along with subsequent shifting while aground, indicate that the vessel appears to have killed or injured many corals, sponges and other reef dwelling animals. NOAA and other trustees are currently developing a comprehensive assessment plan to determine and document the nature and extent of injury and loss of living resources within the sanctuary. NOAA and the State of Florida have elected to pursue a Natural Resource Damage Assessment (NRDA) claim for injuries to FKNMS resource.

The responsible party has expressed an interest in cooperating with the injury assessment activities and assured authorities that any NRDC claims that may occur as a result of the grounding will be addressed. NOAA and its federal and state partners are presently engaged in emergency restoration activities to minimize the losses of sanctuary resources injured by the grounding. This includes reorienting overturned coral heads, gluing shattered coral heads back together, as well as temporarily relocating coral to safe locations for relocation and transplantation later, once the site has been stabilized structurally.

FLORIDA KEYS NATIONAL MARINE SANCTUARY RECEIVES STATE APPROVAL

Governor Lawton Chiles and the State Board of Trustees unanimously voted in support of the Florida Keys National Marine Sanctuary January 29th in Tallahassee acknowledging the "true partnership" between the state of Florida and the National Oceanic and Atmospheric Administration. The vote concludes six years of planning and public discussion to establish a marine sanctuary for America's only living barrier coral reef, vast seagrass meadows, mangrove fringed islands, and the rich marine life these marine communities support. "It has been a challenging effort to address diverse public and private interests while protecting and managing these waters. Our effort now stands as the model for cooperative protection of the world's natural treasures," said Terry Garcia, NOAA acting deputy administrator. Six years ago, Congress asked the state of Florida and NOAA to join forces to protect the Florida Keys reef system. The state and NOAA have worked together with the local community on a strategy to protect the Keys' fragile marine resources while preserving the unique lifestyle and quality-of-life associated with the Florida Keys. "Partnerships form the backbone of the National Marine Sanctuary Program. And the most important partnership is the one we -- the state of Florida and NOAA -- have with the users and visitors of the sanctuary. Together we serve as the stewards of this fragile environment," Mr. Garcia told the Governor and trustees.

"Hopefully, the sanctuary can now bring everyone together to protect this beautiful resource," said Billy Causey, sanctuary superintendent. "Whether it's installing mooring buoys or expanding our volunteer programs, the sanctuary takes an innovative approach to make sure that today's coral reef ecosystem will be here for our children and our grandchildren," he said. The Florida Keys National Marine Sanctuary is one of 12 marine sanctuaries that protect the nation's significant

natural and cultural marine resources. The United States Congress established the 4,480-square nautical kilometer Florida Keys sanctuary in 1990 to protect the world's third largest barrier reef system. Established 25 years ago, the National Marine Sanctuary Program works cooperatively at the local, state and national levels to balance the enjoyment of our oceans with their long-term protection.

DATA BUOY REQUESTED BY SEN. WYDEN FAILS OFF THE COAST OF OREGON; NO FUNDS AVAILABLE FOR REPLACEMENT

On January 27th, a replacement data buoy failed which was deployed at the request of Sen. Ron Wyden (D-OR) off the Oregon coast near Stonewall Bank. It was positioned to serve in place of a buoy which also malfunctioned in August, 1996. Data buoys are used to collect information on wind speed, direction and gust; wave height and period, air and sea temperatures, and barometric pressure from out in the ocean. Although the Stonewall Bank buoy was funded only by the U.S. Army Corps of Engineers through Fiscal Year 1995, based on its critical location off of the Oregon Coast, the National Data Buoy Center (NDBC) found the funds to replace the buoy at the request of Sen. Wyden. Unfortunately, after only 17 days at sea, the buoy suddenly failed as a result of being struck by a boat or from a mechanical failure. As explained to Sen. Wyden's office, there is no funding available to replace this buoy. NDBC is working with the U.S. Coast Guard to recover the buoy and disestablish the station.

FEDERAL DISTRICT JUDGE UPHOLDS NORTHEAST FISHERIES CONSERVATION PLAN

In a victory for NOAA, a federal district court judge ruled on February 3rd that the recovery plan for Northeast groundfish is "rational, though controversial." The decision lays to rest a long-standing lawsuit brought against the plan by Maine fishing interests. Portland, Maine, Federal District Judge D. Brock Hornby ruled in favor of the Secretary of Commerce, the overseer of the National Marine Fisheries Service (NMFS) programs. He upheld all issues outlined in the suit brought by Associated Fisheries of Maine (AFM), an organization of fishermen. The judge concluded that although the plan's measures will significantly affect the fishing industry and fishing communities, it was developed in accordance with the law and within the agency's mandate to build sustainable fisheries. The plan is now known as Amendment 7 to the Northeast Multispecies Fishery Management Plan. "The judge's reasoning validates the long process and difficult decision-making that was required of the New England Fishery Management Council, the fishing industry, the environmental community, and the agency in order to get a plan in place that had a high probability of success," said Dr. Andy Rosenberg, Northeast regional NMFS director.

450-METER PROTECTION ZONE FOR ENDANGERED RIGHT WHALES

To combat a five fold increase in the accidental fatality rate NOAA on February $11^{\rm th}$ announced new safety measures to protect the most endangered whale off the Atlantic coast, the northern right whale. The prohibitions within this rule will *Continued on page 6*

restrict all vessels and watercraft, swimmers, and aircraft from approaching within 450 meters of a right whale to minimize disturbance to the animal. If a vessel is within the 450-meter restricted area, it must immediately depart the area at a slow, safe speed in a direction away from the whale. In the last 18 months, at least 14 right whales have died off the East Coast, nine of which are known to have died or sustained serious injury from entanglements in fishing gear, ship strikes, or other human-induced activities. National Marine Fisheries Service (NMFS) officials believe that whale watching operations which focus on the humpback and finback whales will only be minimally affected. Ten thousand right whales once inhabited U.S. waters before commercial whaling of the early 1900s reduced populations. Today, only about 300 right whales remain

PRESIDENT CRITICIZES CANADA FOR ALLOWING NATIVE WHALE KILLINGS

In a sharply worded statement, the President on February 10th criticized Canada for permitting the subsidence killing of two endangered bowhead whales by native Arctic peoples. On December 12th, former Commerce Secretary Mickey Kantor had certified Canada under the Pelly Amendment for issuing the whaling licenses in contravention of the conservation program of the International Whaling Commission (IWC). Canada withdrew from the IWC in 1982. President Clinton, in a letter to Congress, said: "Canada's unilateral decision to authorize whaling outside of the IWC is unacceptable."

The President said that "Canada's conduct jeopardizes the international effort that has allowed whale stocks to begin to recover from the devastating effects of historic whaling." Of particular concern to the President was whaling in the Eastern Canadian Arctic which "poses a particular conservation risk, and the decision to take this risk should not have been made unilaterally." Because of the Canadian actions, the President has ordered the Commerce Department, acting under the Marine Mammal Protection Act, to withhold consideration of any Canadian requests for waivers to the existing moratorium on the importation of seals and/or seal products into the United States. Further, the President instructed the State Department to oppose Canadian efforts to address trade in marine mammal products within the Arctic Council.

NOAA FISHERIES AND CALIFORNIA FIND NEW DATA ON SACRAMENTO RIVER WINTER-RUN CHINOOK SALMON

The National Marine Fisheries Service (NMFS) on February 19th announced slightly eased restrictions on the harvesting of Sacramento River winter-run chinook salmon. In a letter to Members of Congress, NMFS Administrator Rolland Schmitten said he was "happy to report that the estimate of the 1996 spawning run of winter chinook, although still less than 1,000 fish, showed an increase in numbers compared with that of the 1993 parent brood year." This is part of an update of the March, 1996 biological opinion for Sacramento River winter-run chinook salmon. The biological opinion examines impacts of the Washington, Oregon and California commercial and recreational salmon fisheries on the stock.

The results of the updated biological opinion support a change in escapement levels—the number of fish needed to escape fishing in order to rebuild a sustainable population. The required increase in escapement level in the reasonable and prudent alternative is being lowered somewhat (from 35 percent to 31 percent) based on new data, and is being compared to a 5-year (rather than 3-year) base/average. This will result in more consistent management over the next several vears. The NMFS Southwest Regional Director announced the revised information at the annual meeting with the State of California to review the 1996 salmon season and begin discussions on the 1997 season. This announcement will lead to a similar presentation later at the Pacific Fishery Management Council. This change would result in a similar harvest rate than that allowed under last year's opinion. However, preliminary results from a recent California Department of Fish and Game study indicates that incidental hooking mortality -- fish that expire after they are caught and released -- could actually be 50 percent, instead of 13 percent as previously thought. Therefore, even though NMFS is decreasing the required escapement level, if the Council applies the study the higher hooking rate will need to be accounted for in generating recommended harvest rates for 1997.

NOAA MAJOR PLAYER IN ADMINISTRATION CLEAN WATER INITIATIVE

Last August, President Clinton announced a new initiative to protect all communities from toxic pollution. Pollution continues to degrade our nation's ocean and Great Lakes coastal waters costing states potential jobs, tourism dollars, and opportunities for sustainable economic growth. The President's Clean Water Initiative will turn plans into actions by eliminating sources of toxic pollution in coastal communities.

- --Beaches closed by pollution will be restored to public use. In 1995, U.S. beaches were closed or advisories were issued on more than 3.522 occasions.
- --Shellfish beds will be reopened for public and commercial harvest. In 1990, degraded water quality closed or restricted nearly 30 percent of U.S. coastal shellfish growing waters. Right now over half of the 2.2 million hectares of shellfish growing waters in the Gulf of Mexico, the nation's top shell-fish-producing region, are closed or restricted due to chronic water quality problems.
- --Urban waterfronts will be redeveloped in the nation's coastal and Great Lakes cities. Many urban waterfronts have been abandoned or undergone decline due to contaminants and poor environmental quality. NOAA has a key role in this interagency initiative designed to make coastal waters safe and clean for all Americans by the year 2000. NOAA will contribute to three parts of the President's Initiative:
- 1. "To expand every American's right to know about toxic pollution," the NOAA budget provides an additional \$2.9 million to its Coastal Monitoring and Environmental Assessment program to expand and improve the nation's coastal monitoring programs. Working in partnership with coastal centers such as the one at the University of New Hampshire,

NOAA will develop and implement state-of-the-art monitoring technology for deployment in coastal areas including the Great Lakes.

- 2. "To make water clean and safe for all Americans through the protection of the Great Lakes, coastal resources and estuaries", the NOAA budget provides \$18 million to expand its Coastal Zone Management (CZM) program. This unique federal state partnership program is a proven entity addressing critical pollution issues in the marine and Great Lakes coastal states. NOAA in conjunction with the National Sea Grant College Program would provide technical assistance, financial support and guidance to help states find and implement solutions to these problems.
- 3. "To accelerate Superfund toxic waste cleanups in our communities", the NOAA budget provides \$1 million to NOAA's Coastal Resources Coordination Program. Working closely with the Environmental Protection Agency, states and localities, this successful program provides critical scientific and technical information to interagency teams working to cleanup Superfund sites located in coastal areas.

NOAA FINDS OUTSTANDING IMPROVEMENTS IN MAINE AND NEW HAMPSHIRE COASTAL PROGRAMS

Maine and New Hampshire have made outstanding improvements to their coastal programs over the past three years, protecting the coastline as well as helping state residents a NOAA team announced on January 22nd. The team had conducted a week-long series of public hearings and private meetings across the adjacent states in September.

MAINE

The team documented 17 projects that the state coastal program has undertaken to improve the shoreline. These projects ranged from devising plans for specific portions of the coast, such as the Damariscotta River estuary, to formulating a unique program that trains and certifies local enforcement officials. The state also recently started the Shore Stewards Partnership Program, which trains local volunteers to monitor the quality of Maine's coastal waters. In addition, the state began a Marine Volunteer Program in the Penobscot Bay region that intensively trains residents on coastal issues, then matches the volunteers with coastal projects. At the time of the evaluation, Maine residents had logged more than 515 hours of coastal community service through the Marine Volunteer Program alone. These Marine Volunteers participated in pollution surveys, coastal cleanups, historic preservation, salmon restoration and habitat surveys.

"The success of Maine's program can really be connected to the way the people who run the program have gotten coastal communities involved in helping the coast," noted John McLeod, NOAA's evaluation team leader. "When we see so many people doing so much for the coast, we know right away that we have an outstanding program." After the Maine visit, the NOAA evaluation team deemed the Maine Coastal Program "fully adhering to its coastal management plan," meaning that the program is in good standing and meets the terms and conditions of NOAA's National Coastal Program.

Public participation and involvement have become important elements of the NOAA program.

NOAA sends an evaluation team into the state once every three years to see how well the state is doing in maintaining the health of its coast and in meeting residents' needs to use and preserve the coast. During this visit, the evaluation team met with representatives from state and local government agencies and environmental organizations, as well as with business and community leaders about the state's progress in maintaining a healthy, balanced coastline. Maine is one of 30 coastal states and U.S. territories voluntarily participating in the NOAA coastal program. Under the program, the federal government identifies nationwide coastal problems and goals to resolve those problems. States determine how best to resolve those problems and meet those goals using their own laws and policies.

NEW HAMPSHIRE

The team documented a number of accomplishments, including examples of a coordinated, science-based approach to improving the coast. The state also excelled in effective education, outreach, and strategic funding, which encouraged coastal communities and the general public to get involved and help the coast. "The program's accomplishments ranged from establishing a link between scientists, state resource managers and nonprofit organizations to supporting more than 250 projects that aided communities in their access to and protection of the coast.

According to the evaluation team, the state is also making a significant effort to minimize water pollution reaching the coast from stormwater runoff and septic systems. The team cited two specific demonstration projects, one in the Oyster River watershed and the other focused on the Exeter/ Squamscott River. One important component in both projects is educating local residents and county government officials about the common sources of runoff pollution and then working with them to devise the best possible management methods. These education and outreach programs not only heightened local awareness of runoff pollution but also motivated approximately 800 volunteers to participate annually in collecting and cataloging debris found on Atlantic coast beaches and along the state's tributaries.

FEDERAL WEAKFISH REGULATIONS PROPOSED TO COMPLEMENT COASTAL STOCK REBUILDING EFFORTS

To rebuild the overfished stock of Atlantic coast weakfish to healthy levels, the National Marine Fisheries Service (NMFS) has proposed to regulate the harvest of weakfish in federal waters from Maine to Florida, NOAA announced on February 21st. The fisheries service is seeking comments on the proposal at three public hearings along the East Coast in March. According to fisheries service officials, biological indicators show that the weakfish stock is severely overfished. Therefore, the fisheries service is proposing to implement the following measures in federal waters:

- 30 centimeter minimum size limit;

- mesh sizes compatible with the size limit;
- bycatch possession limit of 68 kilograms for smaller mesh sizes;
 - no flynetting south of Cape Hatteras;
 - commercial landings of weakfish only in certain states such as Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, and Florida.

Commercial and recreational fishermen target weakfish in East Coast waters from Massachusetts to Florida. Fishermen catch about 3.6 million kilograms of weakfish annually, but marine fisheries scientists believe millions more could be taken if weakfish stocks are managed to a healthy state. These regulations are expected to begin the process of rebuilding the stock in coordination with other measures implemented under the Atlantic States Marine Fisheries Commission's (ASMFC) Weakfish Fishery Management Plan.

The National Marine Fisheries Service is responsible for managing Atlantic coast weakfish in federal waters, while the ASMFC, consisting of 15 East Coast states plus the District of Columbia and the Potomac River Fisheries Commission, is responsible for managing weakfish in state waters. The Mid-Atlantic Fishery Management Council has the lead in developing a federal weakfish fishery management plan, but has been unable to do so because of workload constraints. In the absence of a federal fishery management plan, the Atlantic Coastal Fisheries Cooperative Management Act allows the Secretary of Commerce to implement regulations in federal waters that complement the ASMFC weakfish plan in state waters. The ASMFC fishery management plan already requires Atlantic coast states to implement measures similar to those proposed for federal waters, and has requested supportive action by the Department of Commerce in federal waters.

The fisheries service, in cooperation with ASMFC and the states, will hold three public hearings along the Atlantic coast in March to gather public comment. Additionally, the fisheries service is asking for public comments on a draft environmental impact statement for weakfish that examines the condition of the stock and various regulatory alternatives. The draft impact statement will serve as background information for the proposed rule. Copies of the impact statement and proposed rule may be obtained by calling Tom Meyer of the National Marine Fisheries Service at (301) 427-2014.

REP. METCALF CRITICIZES JAPAN FOR ORCA WHALE CAPTURE

In February 26th House floor remarks, Rep. Jack Metcalf (R-WA) expressed "deep concern" over the early February capture of five orca whales off the coast of Japan. The orca whales were netted and separated from their whale family, called a pod vital for their survival. The Washington State Republican said that the captured orcas were scheduled to be

sold to marine amusement parks and a whale museum. "The capture of orcas was allowed under a permit to gather them for research purposes. Clearly, the use of whales for business and entertainment purposes blatantly violates the conditions of the permit," Rep. Metcalf said. "It is my understanding that orca pods appear very infrequently in Japanese waters. Destroying even one orca pod can cause great harm to the small orca population in that area." He predicted that the entire orcra pod will "certainly suffer... I cannot condone this act and will do whatever I can to see that the five whales are released immediately," Rep. Metcalf told his colleagues.

NOAA PARTICIPATES IN RECYCLING OF WASTE COOKING OIL INTO BIODIESEL EXPERIMENT

The U.S. Department of Energy has reported that NOAA patrol boats in the Florida Keys National Marine Sanctuary are using environmentally-friendly biodiesel partially produced from recycled used restaurant cooking oil. The front page of the publication features a picture of a NOAA patrol boat docked in front of a 1,900 liter fueling tank sitting under lush tropical vegetation. The fall 1996 issue of Biofuels Update stated that the biodiesel is particularly welcome in environmentally-sensitive areas such as the Keys. "Divers are very aware of water pollution issues and may appreciate biodiesel's cleaner-burning and biodegradable attributes," said Mark Nordby, a spokesman for NOPEC, the biodiesel producer. NOPEC has a plant in Lakeland with a 76 million liter capacity for biodiesel annually. Its current production uses about 50 percent virgin soybean oil and 50 percent waste oil. By working with the Florida Restaurant Association, its goal is to increase its waste oil feedstock use to about 90 percent. The biodiesel manufactured from waste oil is very competitive with conventional diesel. NOPEC's main customers are boat owners in the environmentally sensitive waters of the Florida Keys and Chesapeake Bay. Boat owners are reporting less black smoke and better engine performance because of biodiesel's increased lubricity and higher cetane, said Henry Rehberg, NOPEC's marine advisor. Eight marinas in the Chesapeake Bay now sell biodiesel under the brand name BioBlend.

NOAA UNVEILS U.S. FRAMEWORK FOR THE INTERNATIONAL YEAR OF THE REEF

On February 24th, NOAA Administrator Dr. D. James Baker and State Department Under Secretary for Global Affairs Tim Wirth, announced the framework and goals of the U.S. Coral Reef Initiative. Baker and Wirth were joined by Del. Donna Christian-Green (D-VI) and Jean-Michel Cousteau at this event. 1997 has been declared the International Year of the Reef (IYOR) as a means to raise public awareness about the global degradation of the world's coral reef ecosystems. NOAA, the primary federal agency charged with the stewardship of domestic coral resources, has developed an action plan to build on existing management and research activities and to address gaps and needs in existing programs. NOAA's contributions to the U.S. Coral Reef Initiative address three priority areas: science for improved management; solutions for conservation and sustainable development; and, improved information and outreach. In addition to these priorities NOAA also

is launching a year long public awareness campaign in concert with the National Fish and Wildlife Foundation, the American Association of Zoos and Aquariums, the Earth Communications Office, the Professional Association of Dive Instructors, and the renown artist, Robert Lyn Nelson, who has contributed an original painting to serve as the official IYOR poster.

A coral reef hotline provides more information on how to protect reefs. This hotline, **1-888-coral reef**, is sponsored by the Earth Communications Office with the generous support of the Goldman Foundation. World famous explorer, Jean-Michel Cousteau narrates the coral reef hotline.

FISHERIES APPROVES LIMITED ACCESS SYSTEM TO PROTECT ILLEX SQUID

On February 21st, the National Marine Fisheries Service (NMFS) announced that it was going to prevent the overharvesting of the Illex squid. The agency found that a limited access system of management was appropriate for the Illex squid fishery, which is considered fully utilized. The Mid-Atlantic Fishery Management Council is in agreement with NMFS action to approve the Amendment. In response to concerns from New England fishermen, NMFS and the Mid-Atlantic Council have ensured that this resubmitted measure establishes a structure that could allow for future development of the Illex squid fishery in New England, if resource conditions allow. The New England Fishery Management Council also has requested joint management responsibility for the Fisheries Management Plan (FMP).

BLUEFIN TUNA FISHERY CLOSES OFF NORTH CAROLINA

FISHERIES SERVICE DIRECTOR ACTS TO ALLOW MORE FISHERMEN ACCESS TO LIMITED RESOURCE

A combination of sizable landings and high catch rates by Atlantic bluefin tuna fishermen has resulted in an interim closure of the Angling category, the National Marine Fisheries Service (NMFS) announced on February 26th. The Angling category fishery for school, large school, and small medium Atlantic bluefin tuna will close on March 2nd and remain closed until further notice. The fisheries service has amended the regulations governing the Atlantic bluefin tuna (ABT) fisheries to provide the agency authority to close and/or reopen all or part of the Angling category in order to provide for equitable distribution of fishing opportunities throughout the species range. "I am closing the Angling category for bluefin to ensure that fishermen from other areas of the East Coast have the same opportunity to catch these fish later in the season, and that we have the best possible opportunity to gather scientific data," said Rolland Schmitten, fisheries service director. The closure will be reassessed as more data become available. "I had hoped that reducing the bag limit for recreational anglers from one-fish-per-person to one-fish-pervessel, imposed in January, would have been sufficient to eliminate the need for an early closure," Schmitten added. "Unfortunately, with all the fishing effort for bluefin tuna, that has not proven to be the case."

Historically, school bluefin tuna arrive off Virginia in May

and move northward through the mid-Atlantic region during the summer feeding migration. While the final 1997 annual quota for the Angling category of ABT has not yet been established (the 1996 allocation was 243 mt), if the current harvest rate continues, it is possible that a significant portion of the entire Angling category quota might be taken prior to the time that the species migrates north. Anglers may continue to fish for school, large school and small medium ABT, measuring 69 centimeters to less than 119 cm total curved forklength under the fisheries service's tag and release program. Anglers should verify that the trophy category remains open by calling the fisheries service's 24-hour Information Line at (301) 713-1279 prior to each fishing trip.

FISHERIES SERVICE PROPOSES LIMITED ACCESS, OTHER AMENDMENTS TO ATLANTIC SWORDFISH MANAGEMENT PLAN

To assist in the rebuilding of Atlantic swordfish stocks, the National Marine Fisheries Service (NMFS) announced on March 3rd new management proposals designed to reduce the prospect of future increases in fishing capacity and associated bycatch of this species. The proposal, which includes a plan to restrict future access to the fishery, is based in part on recommendations by the commercial fishing industry, scientists and others interested in protecting and preserving swordfish stocks while maintaining a viable fishery. A primary intent of this proposal is to hold commercial harvesting capacity at recent historic levels to prevent the possibility of future increased fishing efforts by fishermen who have not targeted swordfish in the past, but who currently hold permits. The number of permitted vessels that currently participate in the fishery is far less than the number of commercial permits annually issued for swordfish. The latest scientific evidence confirms that the north Atlantic swordfish stock is overfished. Its population is estimated by scientists to be at 67 percent of its optimum level, and the average size fish landed has declined to 38 kilograms compared with 120 kgs thirty years ago. Populations of swordfish along the Atlantic and Gulf of Mexico coasts are now so low that a thriving recreational fishery and a commercial harpoon fishery dating from the 19th century have both been essentially eliminated. To ensure that the fishing industry and the public have adequate time to assess the impact of both this swordfish proposal and a similar proposal to limit entry into the Atlantic shark fishery, the public comment period for the proposed rule on shark limited entry has been extended to coincide with the swordfish comment period. Written comments must be received on or before April 28th. Send comments to Rebecca Lent, Chief, Highly Migratory Species Management Division, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910.

MORE EFFECTIVE MANAGEMENT TOOLS PROPOSED FOR BLUEFIN TUNA; FISHERIES SERVICE DIRECTOR RESPONDS TO FISHERMEN'S CONCERNS

The National Marine Fisheries Service (NMFS) is offering a series of sweeping proposals to more effectively manage the valuable and highly-competitive Atlantic bluefin tuna fishery for 1997, it announced on March 3rd. The fisheries service

proposes to establish a new tuna permit program to gather better catch and fishing effort information; prohibit all fishing by General category permit holders on restricted fishing days and prohibit catch of smaller size fish by General category fishers; prohibit use of spotter aircraft except in the Purse Seine category; and split the Angling large school/small medium and trophy category quotas into a North/South division. The fisheries service will hold a series of public hearings to receive comments on these proposals.

The new proposals are the result of comments and suggestions from fishermen and stakeholders as part of two earlier Advanced Notices of Proposed Rulemaking and a commitment by Rolland Schmitten, NMFS director, to make needed management improvements. "Last September, I promised to improve our management of this fishery and provide more accountability," said Schmitten. "These measures will give us some effective tools to meet those promises." The proposed changes to Angling category regulations also are expected to lengthen the fishing season and allow fishermen from a greater geographical area to pursue bluefin for a longer period of time.

Fishermen have expressed concern about the agency's ability to adjust catch limits in a timely manner to avoid overharvest or category closures to meet management or scientific needs. To address this, the agency implemented an interim final rule that allows the fisheries service director to adjust fishing activities in an identified area. This should help ensure that fishing occurs throughout the season and that all fishermen have an equitable opportunity to harvest a portion of the quota. The director will not make a decision until variations in seasonal distribution, abundance, migration patterns or catch rate of bluefin are determined. According to fisheries service officials, the permit program tracking systems will also accommodate automated catch reporting and reduce its burden while supplying more timely and accurate data than current survey-based reporting. Fisheries service officials also believe proposed revisions requiring anglers to call in their catches to an automated telephone reporting system will improve the service's ability to monitor the Angling category catch. The Large Pelagic Survey will continue to be conducted, and the two reporting systems will be used to improve data gathering. To address concerns about quota monitoring and effective effort controls, the fisheries service proposes to prohibit the retention of bluefin less than the large medium size class by vessels permitted in the General category, and to prohibit all fishing by persons aboard vessels permitted in the General category on designated restricted-fishing days. In addition, General category vessels would be required to complete pelagic fisheries vessel logbooks for all fishing trips. The proposed requirements would improve distribution of fishing opportunities, decrease bluefin mortality, and improve the accuracy of catch estimates for both the Angling and General categories.

NOAA UNVEILS FINAL PLAN FOR HAWAIIAN ISLANDS HUMPBACK WHALE SANCTUARY

Representatives from the NOAA unveiled the final management plan for the Hawaiian Islands Humpback Whale National Marine Sanctuary in Honolulu on February 19th. A citizens advisory council helped guide development of the sanctuary plan which balances protection of Hawaii's marine environment with the quality-of-life and way-of-life it supports. According to Terry Garcia, NOAA's Acting Deputy Administrator, "Hawaii's sanctuary brings a community-based approach to the long-term protection of the humpback whale and its habitat. The Hawaiian Islands Humpback Whale National Marine Sanctuary is an important part of a larger effort to protect the health of Hawaii's ocean and invest in the future of its economy." Added Sanctuary Liaison Allen Tom, "The Hawaii sanctuary gives local residents a direct voice in the protection of humpback whales."

The relatively shallow, warm waters surrounding the main Hawaiian Islands comprise one of the world's most important humpback whale habitats. Scientists estimate that two-thirds of the entire North Pacific humpback whale population (2,000 to 3,000 whales) migrate to Hawaiian waters to breed, calve and nurse. This number is down from the estimated 15,000 whales that existed in pre-whale hunting days. The continued protection of humpback whales and their Hawaiian habitat is crucial to the long-term recovery of this magnificent endangered species. The Hawaii sanctuary was created in 1992 to provide protection for humpback whales and their Hawaiian habitat. Since that time, NOAA, the state and the sanctuary advisory council cumulatively have held dozens of public meetings and received hundreds of public comments to develop the final management plan. Highlights of the sanctuary management plan include:

- --a 3,360 square nautical kilometer sanctuary encompassing the majority of the humpback whale's Hawaiian habitat; a prohibition against sanctuary-imposed user fees;
- --a protection strategy that increases awareness of existing state and federal regulations that protect the whales and their habitat; a sanctuary advisory council to ensure continued local involvement;
- --recognition of Native Hawaiian subsistence, cultural, and religious uses within the sanctuary;
- --and, research and education programs that build upon existing successes.

Before the final approval, the sanctuary plan must go through a 30-day review period as required under the National Environmental Policy Act (NEPA), to be followed by a subsequent 45-day review by the Governor of Hawaii and Congress.

The Hawaiian Islands Humpback Whale National Marine Sanctuary is one of 12 marine sanctuaries administered by NOAA that protect the nation's significant natural and cultural marine resources. In 1997 the Marine Sanctuary Program is celebrating its 25^{th} anniversary.

NOAA PROVIDES ASSISTANCE TO URUGUAY TO COMBAT OIL SPILL AT REQUEST OF THE UNITED NATIONS DEVELOPMENT PROGRAM

A three-member NOAA team was dispatched to assist the Uruguayan government to contain a massive early February oil spill at the request of the United Nations Development Program (UNDP) on behalf of the National Fisheries Institute of Uruguay. UNDP paid for the costs associated with the NOAA mission. The San Jorge, a Panamanian-flagged tanker, ran aground in early February off Uruguay's coast, spilling crude oil that formed a slick about 32 kilometers long. Eventually the spill broke into smaller slicks with the use of chemical agents dropped by planes and ships from Uruguay and neighboring Argentina. The oil affected about 4.8 kilometers of beach near Jose Ignacio, an area of luxury homes about 64 kilometers northeast of Punta del Este, said Capt. Daniel Loureiro, a navy press spokesman. Uruguayan Navy ships and planes sprayed chemicals on a wind-driven oil spill in an attempt to prevent it from seeping into the beaches near the luxury resort of Punta del Este. Loureiro said the navy was using chemicals to try to keep the spill away from Isla de Lobos, a small rocky coastal island where 250,000-400,000 sea lions and fur seals raise their pups. It is considered one of the densest concentrations of marine mammals in the world. The NOAA team included Dr. Tom Loughlin, who recently completed a book on the impact of the Exxon Valdez spill on marine mammals. The NOAA team included representatives from Hazmat and the National Marine Fisheries Service (NMFS). They provided shoreline assessment training for local volunteers and inspected fur seals and sea lions on the Isla de Lobos, an area of heavy oil impacts.

Punta del Este and neighboring beach communities are packed with tourists, mainly from Uruguay, Argentina and Brazil, during the southern hemisphere's peak summer months of January and February. Transportes Maritimos Petroleros, an Argentine firm that operated the San Jorge, said in a statement the tanker was carrying 370,000 barrels of oil when it left the southern Argentine port of Comodoro Rivadavia headed for Sao Sebastian. Brazil.

CONOCO TO RESTORE WETLANDS IN LOUISIANA

Two agreements aimed at creating and enhancing habitat for fish and wildlife were announced March 6th by NOAA, the Louisiana Department of Environmental Quality and Conoco Inc. These restoration projects will compensate for natural resource injuries associated with a March 1994 chemical release (ethylene dichloride) into the Clooney Island Loop area of the Calcasieu Estuary. State and federal trustees, on behalf of the public, worked cooperatively with Conoco to forge resource restoration and protection agreements under the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as the Superfund Act, and the Louisiana Environmental Quality Act. Together, the agreements result in creation and long-term protection of more

than 80 hectares of habitat on former farmland in the Hippolyte Coulee - Black Bayou area, located about 11 kilometers south of Lake Charles in southwestern Louisiana. Under the first agreement, 10 hectares of neglected farmland are being restored to cypress swamp-brackish marsh habitat to compensate for natural resource injuries associated with the chemical release. "This agreement reflects the cooperative spirit that can be achieved between industry and state and federal natural resource trustees under laws designed to restore coastal resources affected by hazardous substances," said Acting NOAA Deputy Administrator Terry D. Garcia. "The agreements demonstrate a strong commitment to a healthy environment while avoiding lengthy and expensive studies and litigation." Under the second agreement, Conoco is restoring 42 hectares of similar habitat adjacent to the first restoration site in response to a compliance order issued by the Louisiana Department of Environmental Quality. Both projects are currently underway. More than 60,000 one-year-old native tree saplings have recently been planted, including species such as bald cypress, overcup oak, nuttal oak, green ash, bitter pecan, common persimmon, willow oak and water oak. The habitat will provide sanctuary to many indigenous animals and fish species.

NOAA ATMOSPHERIC HAPPENINGS

SECRETARY DALEY APPROVES DEPLOYMENT OF ADVANCED WEATHER SYSTEM

Secretary of Commerce William M. Daley on February 12th approved the limited deployment of the National Weather Service's Advanced Weather Interactive Processing System (AWIPS). Prior to issuing the order, the Secretary interacted with both relevant authorizing and appropriating committees with jurisdiction over weather service programs. The decision authorizes the acquisition and installation in calendar year 1997 of 21 systems with an option for 18 more exercisable in July if appropriate development and deployment progress have been demonstrated. The Secretary said the limited deployment would allow a decision covering the remainder of the 131 unit system to be put off until December. "I believe this decision will allow the program to get the improved tools offered by the current version of AWIPS into the hands of forecasters sooner," the Secretary stated. "I expect that the cost at completion will not exceed the \$550 million total now projected in the President's FY 1998 budget and that the planned level of performance will be maintained," he said. The Secretary directed NOAA to provide additional scheduling and cost information on AWIPS to relevant committees.

SEN. SNOWE INTRODUCES WEATHER SERVICE CLOSURE LEGISLATION

Sen. Olympia Snowe (R-ME) has introduced S 271 requiring the Secretary of Commerce to ensure that at least an equivalent level of service will be supplied to the public and affected agencies before closing National Weather Service field stations. The bill was referred to the Commerce, Science and Transportation Committee. In floor remarks, the Maine Republican said the bill would create ad-

ditional office closure certification criteria where field offices are eliminated because of modernization. "My bill would prohibit the Secretary from closing or relocating these offices unless he first evaluates the effect of a closing or relocation on all weather information and services provided to local users."

The Secretary is further required to determine that at least an equivalent level of weather services will be provided in the future," she said. The legislation focuses on offices that serve parts of the country identified as "areas of geographic concern" in the National Research Council's 1995 report. Sen. Snowe specifically cited field offices slated for closing where "people who live in the area have expressed serious concerns." These include Caribou, ME, Williston, ND, Baton Route, LA, and Kalispell, MT.

NEW FACILITY UNDERWAY FOR NOAA'S AVIATION WEATHER CENTER, TRAINING CENTER

The National Weather Service took one of the final steps in the agency-wide modernization program on March 4th as officials used golden shovels to break ground for the new Aviation Weather Center/Training Center building in north Kansas City. Aviation Weather Center Director David R. Rodenhuis and Training Center Director John Vogel joined several representatives of other agencies and the local community in the formalities. Slated for completion in summer 1998, the \$10 million construction project will provide a stateof-the-art, 28,499 square meter facility designed for efficient operations. A crowd of more than 85 spectators huddled inside a large tent to hear the speakers as gusty winds and near freezing temperatures failed to cool the enthusiasm. Led by Rodenhuis and Vogel, all the speakers emphasized that the new building was designed to employ the most modern technologies such as high-volume data and communications lines and would provide employees with much more pleasant surroundings.

Recently beginning its spin up after being a section of the old National Severe Storms Forecast Center in Kansas City, the Aviation Weather Center (AWC) is the NWS' national center for weather information used daily by the Federal Aviation Administration (FAA), commercial airlines and private pilots. Combining the two agencies in one building, Rodenhuis said, provides a modern facility designed for efficient operations and will boost the synergy shared by the two staffs in development and training in the use of ever-more-complex data systems.

NEW SCIENCE SUBCOMMITTEE CHAIR VISITS NOAA HEADQUARTERS

At his request, Rep. Ken Calvert (R-CA), the new chairman of the House Science Subcommittee on Energy and Environment, visited NOAA's Silver Spring, MD, headquarters on March 10th. It is believed that this is the first time a subcommittee chair has toured NOAA headquarters. His subcommittee oversees the National Weather Service, National Environmental Satellite, Data, and Information Service, and the atmospheric programs of the Office of Oceanic and Atmospheric

Research. During his three-hour tour, he saw demonstrations of the operational center of the Advanced Weather Interactive Processing System (AWIPS), the Advanced Hydrologic Prediction System, and NEXRAD (Next Generation Radar) Principal User Processor. He also learned about the El Nino-Southern Oscillation Observing System. He was particularly interested in particulate matter and ground level ozone in the atmosphere. Rep. Calvert recently won election to a third term with 54 percent of the vote. He is formerly a commercial real estate developer. He represents the western suburbs of Riverside County. His district is subject to constant brush fires that hit housing developments in the district's arid hills and contains avocado and citrus producers. The district is home to the University of California-Riverside, Riverside Community College, and March Air Force Base in Sunnymead. Major employers include Rohr, Inc., a manufacturer of aircraft parts and equipment. Rep. Calvert holds a bachelor's degree from San Diego State University.

ATMOSPHERIC SCIENTISTS TO MONITOR TURBULENCE NEAR COLORADO SPRINGS AIRPORT

Weather researchers in Boulder will be monitoring and analyzing air turbulence near Colorado Springs to learn more about the phenomenon in mountainous areas and how to develop better turbulence detection and warning systems to aid in aircraft safety. The field study began February 1st and will continued through the end of March. The Federal Aviation Administration asked NOAA and the National Center for Atmospheric Research (NCAR) to do the study in response to the more than ten major aircraft accidents and incidents that have occurred in mountainous areas during the past ten years, especially the crash of a United Airlines Boeing 737 flight in Colorado Springs in March 1991 in which all aboard were killed.

Although turbulence has not been identified as the cause of the Colorado Springs crash, FAA authorities have asked that researchers from NOAA's Environmental Technology Laboratory (ETL) and Forecast Systems Laboratory, and NCAR's Research Applications Program, all located in Boulder study the phenomenon. The FAA is funding this field study as part of an effort to reduce mountain flying risks.

The scientists will be using a variety of instruments to measure winds and terrain-induced turbulence in the Colorado Springs area. An ETL Doppler lidar will provide radial wind speeds to distances of over 19 kilometers. Due to its narrow, pencil-like beam, the lidar is able to scan in the vicinity of mountains without ground clutter problems. It can also scan along approach paths with minimum effects from aircraft. "The unique remote sensing capabilities of the lidar allow us to measure the wind in clear air very close to mountains and enables us to analyze the complex, three-dimensional winds near Colorado Springs," said ETL meteorologist Bob Banta. Also, four wind profilers (Doppler radars that are pointed vertically) will be placed in the Colorado Springs area to continuously measure winds and temperatures above the ground under most weather conditions.

According to meteorologist Marty Ralph of ETL, "This Continued on page 13

continuous record of winds, temperatures and turbulence above the airport and at other sites will help reveal both the conditions that lead to turbulence, and the turbulence itself." Automated weather stations will look at the surface airflow and will assist researchers in determining under what conditions surface information can be used to infer the existence of hazardous conditions. These systems represent the basic measurement core of the experiment. In addition, a new infrasonic observing system, previously used to detect tornadoes, will be used to listen to low-frequency sounds that may be associated with severe wind events. ETL vans using new static pressure probes will make observations throughout the areas scanned by the Doppler radar. Under the direction of NCAR scientists, the University of Wisconsin's Kingair, based in Laramie, WY., will be making explicit turbulence measurements along the approach and departure corridors of Colorado Springs, as well as mapping the distribution of turbulence in the terminal area.

UNIVERSITY OF OKLAHOMA METEOROLOGIST JAMES F. KIMPEL NAMED NATIONAL SEVERE STORMS LAB DIRECTOR

James F. Kimpel, professor of meteorology and administrator at the University of Oklahoma, has been named as new director of the National Oceanic and Atmospheric Administration's National Severe Storms Laboratory in Norman, OK. The National Severe Storms Laboratory (NSSL) works closely with NOAA's National Weather Service and the university meteorological community. NSSL conducts research to improve forecasts and warnings of tornadoes and other severe weather and was recently depicted in the movie Twister. Kimpel received the 2-year appointment as director of the laboratory through the Intergovernmental Personnel Act, which authorizes temporary assignments of skilled personnel between federal agencies, state or local governments, and institutions of higher education, among others. "Dr. Kimpel brings to NOAA a superb blend of experience as a teacher, scientist and science administrator. He has been instrumental in organizing the close working relationship between the University of Oklahoma and NOAA through the NOAA-University of Oklahoma Cooperative Institute for Mesoscale Meteorological Studies and Oklahoma Weather Center. Early in his career, he served as a scientist in residence at NOAA's Oklahoma City forecast office.

Kimpel received his Ph.D. from the University of Wisconsin in 1973. He has served in a series of academic administrative positions at the University of Oklahoma, including professor and director of the School of Meteorology, senior vice president and provost of the Norman campus, dean of the College of Geoscience, and as director of the Weather Center Program, an alliance of federal, state and private weather organizations. He relieves acting director Douglas E. Forsythe and former director Robert A. Maddox, who retired Sept. 30, 1996.

NATURAL HAZARDS HURRICANE AND TSUNAMI NOAA WEB SITE

March 1997/Issue #22

While avalanches, earthquakes, and tornadoes are rocking movie theaters, they are also rocking the world apart on a World Wide Web site of the National Geophysical Data Center in Boulder. To promote a better understanding of natural hazards, and to assist in natural hazards reduction, the data center maintains a Web site containing data on geological, meteorological, and other hazards. The site contains data and images of earthquakes, landslides, tsunamis, volcanoes, hurricanes, and a host of other hazards, including mud volcanoes in Romania. The site recently won top honors from the NetGuide on-line magazine. After visiting the site, NetGuide noted, "This whole site will rock your world. Our hearts are still pounding." Users can visit the site at: http://www.ngdc.noaa.gov/seg/hazard

NGDC is one of three major data and information centers maintained by NOAA's National Environmental Satellite, Data, and Information Service. NGDC houses data in the fields of solid earth geophysics, marine geology and geophysics, solar-terrestrial physics, and paleoclimatology. NGDC fills tens of thousands of requests each month for data services and publications.

GLOBAL CLIMATE SYSTEM MIGHT BE MORE SENSITIVE TO THE GREENHOUSE EFFECT THAN COMMONLY THOUGHT

The global climate system might be more sensitive to the greenhouse effect than many scientists think, according to a paleoclimatologist at NOAA's National Geophysical Data Center, who reported his findings in the February 20th issue of Nature magazine. Robert S. Webb and a team of scientists performed a series of global climate simulations. They found that incorporating near-modern ocean heat transports, reduced glacial atmospheric carbon dioxide levels, and large terrestrial ice sheets, together with feedback mechanisms, are sufficient to lower annual average global surface temperature by 8 degrees Centigrade and tropical sea surface temperatures by 5.5 degrees Centigrade at the Last Glacial Maximum (LGM).

"While debate continues on the role of the tropics and the ocean in climate change, our results suggest greater climate sensitivity and cooling in the past," Webb concluded. "Furthermore, the greater global cooling shown in our simulations implies a much greater climate sensitivity than previous estimates. This suggests that the expected warming from carbon dioxide doubling may be closer to 4 degrees centigrade warming, rather than more modest estimates of 2.5 degrees Centigrade."

Webb's results indicate that the new cooler tropical LGM temperatures inferred from coral material and noble gases in fossil ground waters could have resulted from the combined impacts of greenhouse effects and of ocean heat maintained at near-modern levels during the Last Glacial Maximum. The coral and ground water evidence and mechanism for tropical cooling described by Webb undercut previously posed arguments that tropical sea surface temperatures have changed

little throughout the Cenozoic period and that such stability will persist in the future. In addition to Webb, the team consists of: David H. Rind and Richard J. Healy, both of National Aeronautics and Space Administration; Scott J. Lehman, University of Colorado; and Daniel Sigman of Woods Hole Oceanographic Institution.

THIRD SATELLITE IN NOAA GOES SERIES TO BE LAUNCHED IN APRIL

The third in a series of five advanced U.S. weather satellites is being prepared for an April 24th launch from Cape Canaveral Air Station, NOAA announced on March 11th. The Geostationary Operational Environmental Satellite, now called NOAA GOES-K, will be renamed NOAA GOES-10 once orbit is achieved. It is currently being processed for launch at a payload processing facility near Cape Canaveral. "GOES satellites are a mainstay of weather forecasting in the United States," said Gary Davis, NOAA's director of satellite operations. "They are the backbone of short-term forecasting or nowcasting. With GOES-K, we are ensuring continuity of GOES data. "The real-time weather data gathered by GOES satellites, combined with data from Doppler radars and Automated Surface Observing Systems, greatly aids weather forecasters in providing better warnings of thunderstorms, winter storms, flash floods, hurricanes, and other severe weather. These warnings help to save lives, preserve property, and benefit commercial interests.

The United States operates two meteorological satellites in geostationary orbit, one over the East Coast and one over the West Coast. NOAA GOES-9, launched on May 23, 1995, is currently overlooking the West Coast out into the Pacific including Hawaii. It is over the Equator at 135 degrees West longitude at an altitude of 35,582 statute kilometers. NOAA GOES-8, launched in April 1994, is overlooking the East Coast out into the Atlantic Ocean and is positioned at 75 degrees West. NOAA GOES-K, to be named NOAA GOES-10 once achieving orbit, will be stored on orbit at 105 degrees West longitude and placed into operation when needed as a replacement for GOES-8 or -9.

NOAA's National Environmental Satellite, Data, and Information Service operates the GOES series of satellites. After the satellites complete on-orbit checkout, NOAA assumes responsibility for command and control, data receipt, and product generation and distribution. The GOES satellites are a critical component of the ongoing National Weather Service modernization program, aiding forecasters in providing more precise and timely forecasts.

NASA's Goddard Space Flight Center manages the GOES contract for NASA's Office of Mission to Planet Earth, Washington, D.C. Goddard manages the design, development, and launch of the spacecraft for NOAA. NASA's Lewis Research Center is responsible for the launch services contract with Lockheed Martin. NASA's Kennedy Space Center is responsible for government oversight of launch operations and countdown activities. NOAA GOES-K, built by Space Systems/Loral, a subsidiary of Loral Space and Communications Ltd., will be launched on an Atlas I rocket, built by Lockheed

Martin. The next two satellites in the GOES series will be launched as required to support NOAA's dual-satellite geostationary observing system.

HYDROLOGY AND THE MODERNIZED NWS

(Continued from Page 1)

Why are hydrologic forecasting efforts important? As forecasts improve people have more time to take appropriate actions to protect themselves and their property. Three-quarters of all presidentially declared disasters are the result of flooding. In an average year more than 100 people are killed by flooding and flash flooding and damages exceed \$2 billion.

DEMONSTRATING AHPS IN DES MOINES

The NWS is demonstrating the Advanced Hydrologic Prediction System and its new hydrologic forecasting capabilities on the Des Moines River Basin throughout March. Following the Great Flood of 1993 in the Midwest, the Des Moines basin was chosen as a first phase toward a national implementation of AHPS. As part of the demonstration, the Des Moines Weather Forecast Office plans on enhancing its entire flood forecasting program by issuing more detailed and more frequent Flood Potential Outlooks during the spring flood season. If flooding occurs, the office will issue more frequent flood statements and warnings using the routinely updated past stage and 5-day forecast hydrographs available through AHPS. Longer-range forecasts resulting from AHPS advanced modeling will help ecosystem managers, farmers, emergency managers, and many other water users prepare for the impact of events ranging from droughts to floods.

NWS METEOROLOGISTS INTEREST IN AHPS

"One of the primary users of AHPS could well be operational forecasters who are responsible for issuing flood watches, warnings, statements and outlooks on a routine basis," according to Erik Pytlak, hydrology program leader at the NWS Forecast Office in Johnston, Iowa. Field meteorologists can use the probability forecasts to determine the chances of flooding in a given basin several days or possibly a couple of weeks in advance. They can then issue more detailed flood potential outlooks to advise customers not only of the potential flood threat, but the magnitude of the threat and the degree of certainty.

THE PAYOFF OF HYDROLOGIC FORECASTING

Better hydrologic forecast methods promise to contribute considerable value to the U.S. economy. In a study conducted at the outset of the NWS modernization, the Commerce Department's National Institute of Standards and Technology (NIST) found that a significant portion of the value realized from the modernization would come from advances in predicting the availability of water resources for the country. "We're already seeing how better short to long term hydrologic forecasts will mean improvements in operating efficiency for dams, better water yields for crop irrigation and hydroelectric power, benefits for river navigation and commercial shipping," Ingram said. On an annual basis, these benefits to the economy are expected to total more than \$750 million.

PROVING THE TECHNOLOGY INTERNATIONALLY

Several other nations are already sold on the capabilities of NWS hydrologic forecasting, said Curtis Barrett, project manager for the NWS Hydrologic Technology Transfer Center in Silver Spring, MD. "For several years we've been sharing our latest river forecasting techniques with Egypt and China, helping those countries better manage their water resources and improve their ability to forecast floods and droughts," Barrett said. The 10 countries dependent on water from the Nile River already use close to 100 percent of the river's capacity in an average year. As populations increase, demand by countries upstream has an impact on downstream countries such as Egypt. With funding from the U.S. Agency for International Development, a state-of-the-art system to monitor, forecast and simulate flows for the Nile at the High Aswan Dam promises to help Egypt make best use of its water resources and anticipate future availability of water based on the potential for droughts or floods

HEARINGS AND MARKUPS

DR. BAKER TELLS HOUSE SUBCOMMITTEE THAT THE PROPOSED \$2.1 BILLION FY '98 NOAA BUDGET PROVIDES BALANCE BETWEEN ENVIRONMENTAL ASSESSMENT, PREDICTION AND STEWARDSHIP

Dr. D. James Baker, Deputy Under Secretary for Oceans and Atmosphere, testified on February 27th on the proposed FY '98 NOAA budget before the House Resources Subcommittee on Fisheries, Wildlife and Oceans (Rep. Jim Saxton, R-NJ). In his statement, Dr. Baker said the agency request is \$78.5 million over the FY '97 enacted. "There is a strong consensus among lawmakers, fishery managers, the fishing industry and the public, that depleted fishery resources must be restored and healthy fisheries must be maintained and managed for greater efficiency... NOAA estimates that restoring fisheries will have a potential \$25 billion total positive impact on the national economy," he said.

Rep. Wayne Gilchrest (R-MD) opened the hearing by noting NOAA's "most valuable" role in the Federal Government. He also said that NOAA has done an outstanding job increasing understanding of the Nation's ecosystem. Rep. Sam Farr (D-CA) expressed strong support for the Marine Sanctuaries program, and thanked Dr. Baker for moving forward with the Santa Cruz fisheries lab. He also suggested looking at extending Coastal Zone Management jurisdiction to the 360-kilometer Exclusive Economic Zone limit. The NOAA Administrator said "well-managed fisheries produce significant and continuous benefits, such as \$1 billion Alaskan groundfish fishery. Controlled access measures implemented in the \$180 million Alaskan halibut/sablefish fishery have resulted in reduced accidents and property loss, increased economic value of the resource, and reduced bycatch." To reflect this commitment to fisheries, Dr. Baker said that NOAA was requesting \$256.3 million for the National Marine Fisheries Service (NMFS), a net increase of \$7.6 million over 1997. An additional \$23 million was requested to relocate the existing Tiburon (CA) fisheries laboratory to Santa Cruz (CA). Increases were also requested to recover protected marine mammal species. "By 2005, NOAA will be on the road to recovering every marine species at risk and maintaining the healthy marine ecosystems upon which they depend," Dr. Baker said.

"In order to maintain the health, productivity, and biodiversity of the Nation's coastal ecosystems," Dr. Baker said, NOAA is requesting \$212.2 million, an increase of \$18.7 million over FY '97. "This is an enormous challenge considering that well over half of the U.S. population lives on the 10 percent of land defined as coastal," the NOAA Administrator stated.

NOAA ADMINISTRATOR SAYS DOMESTIC SECURITY AND GLOBAL COMPETITIVENESS DEPENDS ON TYPES OF SERVICES DELIVERED BY NOAA

The Under Secretary for Oceans and Atmosphere Dr. D. James Baker testified at a March 13th hearing on the proposed FY '98 NOAA budget before the House Science Energy and Environment Subcommittee (Rep. Ken Calvert, R-CA). Also appearing was Department of Commerce Inspector General Frank DeGeorge. Mr. DeGeorge criticized NOAA's Polar-Orbiting Satellite program and other NOAA programs. Joel Willemssen of the General Accounting Office also testified. This was Dr. Baker's third and final '98 budget hearing before House and Senate subcommittees that authorize NOAA's atmospheric and oceanic programs. The hearing came only four days after Subcommittee Chair Rep. Calvert took a precedent-breaking tour of NOAA's Silver Spring, MD, headquarters.

In his testimony, Dr. Baker defended NOAA's \$2.1 billion FY '98 request for new budget authority. He cited several NOAA achievements including the converged National Polar-orbiting Operational Environmental Satellite System (POES). "This program continues to account for government-wide savings in excess of \$1 billion over the life of the program and remains a major success story of the National Performance Review," Dr. Baker said. Additionally, Weather Service modernization should result in \$7 billion in annual benefits to the economy once it is completed, Dr. Baker said. Lives are being saved, property damage avoided, and impacts mitigated for weather-sensitive sectors of the economy."

Dr. Baker fielded questions from Chairman Calvert on the NOAA Corps, fleet modernization, the Advanced Weather Interactive Processing System, and the President's Clean Water Initiative. Dr. Baker said NOAA supported HR 437, the Sea Grant authorization bill before the Science Committee. Ranking Democrat Rep. Tim Roemer (IN) expressed strong interest in dedicated funding for zebra mussel research.

SEA GRANT DIRECTOR TELLS HOUSE SUBCOMMITTEE OF PROGRAM'S REFORMS

In testimony delivered on February 27th, the Director of the National Sea Grant College Program described NOAA's principal partnership with the university community. Dr. Ronald Baird testified before the House Resources Subcommittee on Fisheries, Wildlife and Oceans (Rep. Jim Saxton, R-NJ). The hearing was called to hear testimony on HR 437, to reauthorize the program for the next three years at about \$55 million *Continued on page 16*

each year. Dr. Baird described in detail administrative reforms which by next year will reduce by 50 percent the time required to process Sea Grant proposals through NOAA, despite a 25 percent staff reduction. He described recent program achievements including developing a cadre of 250 seafood safety trainers who will teach the industry new Food and Drug Administration techniques, reducing shrimp, seabird and finfish bycatch loss, and developing a commercial biotechnology industry which could provide new jobs to coastal communities. Members expressed generous support for the program, and inquired as to why the President's request was below the FY 1997 funding levels. Members showed an interest in restoring funding for Sea Grant, as well as zebra mussel and oyster disease research.

EVERY DAY, EVERY PERSON IN U.S. AFFECTED BY NOAA'S MISSION, DR. BAKER TELLS JOINT SENATE SUBCOMMITTEES HEARING ON PROPOSED FY '98 NOAA BUDGET

Under Secretary for Oceans and Atmosphere Dr. D. James Baker explained to two Senate subcommittees the rationale behind NOAA's \$2.1 billion request for FY '98 budget authority, an increase of \$78.5 million over the FY '97 enacted level. The joint hearing was held on March 6th before the Subcommittees on Oceans and Fisheries (Sen. Olympia Snowe, R-ME) and the Science, Technology, and Space Subcommittee (Sen. Bill Frist, R-TN) of the Senate Commerce, Science, and Transportation Committee. It was their first hearing as subcommittee chairpersons. Dr. Baker responded to a wide range of questions from Subcommittee Senators, reflecting the breadth of NOAA's programs and missions. In her opening remarks, Sen. Snowe stated that NOAA has one of the "most important missions" in the Federal Government. Similarly, Sen. Frist stated that "NOAA is respected by people on the street....(Its) reputation is well deserved."

The success of weather service modernization was highlighted by Dr. Baker. "The scientific and capital investment required for the modernization of the weather services is paying off with lives saved, property damages avoided, and impacts mitigated for weather-sensitive sectors of the economy. The NOAA Administrator pointed to 15 minute lead times for numerous tornadoes, 31 hour landfall warnings for Hurricane Fran, and three to five-day advance forecasts for the 1996 East Coast blizzard. "Once modernization is completed, the Nation should realize annual benefits to the economy of some \$7 billion," Dr. Baker said. In explaining, NOAA's seasonal to interannual climate forecast request, the NOAA Administrator said that long-range "climate services will be as important to the 21st century economies and societies as weather forecasting is today."

The insurance industry, especially, "has become increasingly vocal in its support of the essential science underlying climate prediction, due to the tremendous economic impact of weather related natural disasters." For the first six years of this decade alone, insurance providers worldwide have paid out \$48 billion for weather-related losses, almost three and one-half times their pay outs for the entire decade of the 80's.

Dr. Baker also pointed to NOAA's leadership in understanding global change phenomena which "has produced incontestable evidence that carbon dioxide is increasing in the atmosphere." NOAA has also played a "lead role in developing the scientific assessments upon which the United Nations Intergovernmental Panel on Climate Change (IPCC) based its 1995 report. That report indicated that by the end of the next century, temperatures may increase by 1 to 3.5 degree Celsius and sea level may rise 15 to 95 centimeters.

NOAA ACTING ASSISTANT SECRETARY CRITICAL OF PROPOSED SUPERFUND LEGISLATION

Acting Assistant Secretary for Oceans and Atmosphere Terry Garcia testified on March 5th on S 8, the Natural Resources Damage Reform and the Superfund Cleanup Acceleration Act of 1997, before the Subcommittee on Superfund, Waste Control and Risk Assessment (Sen. Robert Smith, R-NH) of the Senate Environment and Public Works Committee. He represented the Departments of Commerce, Interior, Agriculture, Defense and Energy in their role as natural resource trustees. The bill was introduced on January 21st by Sen. John Chafee (R-RI). Acting Assistant Secretary Garcia said "the Administration believes that S 8 does not present an acceptable basis for achieving bipartisan consensus" on reform to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund). "Several of S 8's provisions would severely impede the efforts of the natural resources trustees to protect and restore the Nation's natural resource heritage," he said. Mr. Garcia specifically criticized several of the bill's provisions:

--Precludes Restoration of Non-Use Values. Non-use values are real, though difficult to measure such as the loss of a river to future swimmers and fishermen because of environmental damage. S. 8 provides that there shall be no recovery for impairment of non-use values. To exclude non-use values means that the public will not be fairly and full compensated for loss of resources;

--Restrictions on the Recovery of Interim Loss. S 8 would dramatically restrict the recovery of interim losses at sites where they injury started prior to 1980 and continues to this day, benefiting responsible parties at some of the biggest contamination sites and blocking compensation of loss of public resources.

--Cost Effective Instead of Cost "Reasonable" Restoration. Reasonable is not defined which will need to be interpreted through litigation and may prevent or delay needed restoration. In conclusion, Mr. Garcia said "The Administration's proposal for reforming Natural Resources Damages addresses many concerns that were voiced during previous reauthorization discussions. S 8's natural resource-damage provisions, by contrast, would severely impede the efforts of state, tribal and Federal natural resource trustees, and deprive communities of their right to full restoration of the natural resources that support their economies and their way of life."

SECRETARY DALEY OUTLINES NOAA ACCOMPLISHMENTS BEFORE HOUSE AND SENATE APPROPRIATIONS SUBCOMMITTEES

Secretary of Commerce William M. Daley on March 11th told that House Commerce, Justice, State Appropriations Subcommittee (Harold Rogers, R-KY) that "NOAA programs are helping to save lives and property, and to preserve our natural environment." The Secretary was appearing to discuss the Department's proposed \$4.22 billion FY '98 budget request. He said one of the three missions of the department was "Support for the Nation's Resource Management and Stewardship Responsibilities." He delivered a similar statement on March 13th before the Senate counterpart subcommittee (Sen. Judd Gregg, R-NH)

The Secretary cited several NOAA success stories:

- --Earlier and more accurate forecasts of severe weather;
- --Implementing controlled access measures for some fisheries, reducing accidents and property loss, increasing the economic value of fish by making fresh products available for longer periods;
- --Providing scientific support to the Coast Guard in 70 oil and chemical spills;
- --Partnering with state and local agencies to restore 40,000 acres of coastal habitat;
- --Helping a North Carolina clam-breeding company market its unique concept of direct selling to restaurants, operating a retail store, and opening its clam beds to tourists;
- --Furnishing accurate long-range weather data to a Lincoln, Nebraska electric utility so that consumers could better control consumption costs even during the scorching Great Plains summer.

Rep. Michael Forbes (R-NY) asked Secretary Daley about whether the National Marine Fisheries Service decision to halt bluefin tuna fishing off North Carolina would be extended to the waters off of Long Island. The Secretary said he would get back to the Long Island Republican with a response. Rep. Forbes also asked why NOAA was reducing funding for harmful algae research. The Secretary responded that there was no policy change behind the decision, only that NOAA was the end of its original three year research commitment.

At the Senate hearing, Sen Gregg asked about the status of the AWIPS deployment. Secretary Daley said there will be 21 pilot projects, 18 more scheduled by the end of the year. Secretary Daley said the program was important to the health, safety, and property of Americans. Sen. Dale Bumpers (D-AR) expressed concern about the closure of the Fort Smith forecast office, but was assured by the Secretary but that a new Next Generation radar will be on-line in April.

ACTING ASSISTANT SECRETARY GARCIA DETAILS NOAA NATIONAL AND WORLDWIDE EFFORTS TO CORAL REEF STEWARDSHIP

Acting Assistant Secretary Terry Garcia discussed NOAA's

important role in the federal effort to address the many impacts harming coral reef ecosystems on March 13th, before the House Resources Fisheries, Wildlife, and Oceans Subcommittee (Rep. Jim Saxton, R-NJ). The hearing focused on HConRes 8, expressing the sense of Congress to protect and conserve coral reefs. NOAA, Acting Assistant Secretary Garcia said, has been an important contributor to the design and implementation of the U.S. Coral Reef Initiative. Mr. Garcia highlighted the decline of coral reef ecosystems globally as a call to action and said that NOAA spends approximately \$26 million annually on program activities related to coral reef resources, in particular, NOAA contributed \$1.2 million from FY '96 base funds to support 42 new projects to address coral reef priorities and fill in the gaps of existing NOAA capabilities. Twenty percent of the funds were used to build private-public partnerships. In the Pacific, NOAA has supported sustainable use of reef resources through ecotourism and mariculture. NOAA is working with partners to help prevent illegal trafficking in corals by training import and export personnel. In the Middle East, NOAA has provided technical assistance in support of the Bi-national Red Sea Marine Peace Park. This park protects the coral reefs in Aqaba, Jordan, and Eilat, Israel, and supports sustainable development goals related to coral reef based tourism. Mr. Garcia also noted the need for greater education and outreach and referred to NOAA's contribution to a new national public awareness campaign on the value of coral reefs in connection with the International Year of the Reef. (See related article on page

LEGISLATION INTRODUCED

Rep. James Oberstar (D-MN) on February 4th, HR 550 entitled the "Nonpoint Source Water Pollution Prevention Act of 1997."

Sen. Olympia Snowe (R-ME), on February 5th, S 271 entitled the "National Weather Service Office Closure Criteria Act of 1997".

Sen. Barbara Boxer (D-CA), on February 24th, S 344 to require the relocation of a National Weather Service radar tower which is on Sulphur Mountain near Ojai, Calif.

Sen. James Jeffords (R-VT) on February 26th, S 361 to amend the Endangered Species Act to prohibit the sale, import, and export of products labeled as containing endangered species, and for other purposes.

Rep. George Miller (D-CA), on February 27th, HR 882 to reduce the risk of oil pollution and improve the safety of navigation in San Francisco Bay by removing hazards to navigation, and for other purposes.

Sen. Frank Murkowski (R-AK) on February 27th, S 379 entitled the "Native Alaskan Subsistence Whaling Provision."

Rep. James Greenwood (R-PA), on February 27th, HR 873 to amend the Comprehensive Environment Response, Com-Continued on page 18

pensation and Liability Act to limit federal authority for response action for releases subject to state voluntary response programs, to provide protection for prospective purchasers of land, and for innocent landowners, and for other purposes.

Rep. George Miller (D-CA) on March 10th, HRes 87 expressing the sense of Congress that the United States and the United Nations should condemn fishing practices that are harmful to coral reef ecosystems and promote the development of sustainable coral reef fishing practices worldwide.

Rep. Jack Metcalf (R-WA) on March 17th, HR 1088 to reauthorize appropriations for the conservation of Washington salmon fishery through purchase of salmon fishing licenses and fishing vessels.

UPCOMING HEARINGS

HOUSE AND SENATE NOAA APPROPRIATIONS HEARINGS SCHEDULED

Hearings on NOAA's proposed FY '98 budget with Under Secretary for Ocean and Atmosphere Dr. D. James Baker testifying have been scheduled before the Appropriations Subcommittee on Commerce, Justice, State, the Judiciary, and Related Agencies of the House (Rep. Harold Rogers, R-KY) on April 8th and the Senate (Sen. Judd Gregg, R-NH) on April 24th.

HOUSE NAUTICAL CHARTING HEARING SCHEDULED

The House Resources Fisheries, Wildlife and Oceans Subcommittee (Rep. Jim Saxton, R-NJ) has scheduled an April 24th hearing on NOAA's efforts to reduce "the current backlog of critical area surveys and out-of-date charts, and on the technological capabilities currently available to improve navigational services in United States waters." A NOAA witness has not yet been selected.

TUNA/DOLPHIN HEARINGS AND A MARKUP TENTATIVELY SCHEDULED IN BOTH CHAMBERS

The hearings have been scheduled on legislation to amend the Marine Mammal Protection Act (HR 408/S 39) to support the International Dolphin Conservation Program in the eastern Tropical Pacific as follows: April 9th in the House Resources Fisheries, Wildlife and Oceans Subcommittee (Rep. Jim Saxton, R-NJ), (followed by a markup on April 10th) and tentatively for April 17th in the Senate Commerce, Science, and Transportation Oceans and Fisheries Subcommittee (Sen. Olympia Snowe, R-ME). The legislation is supported by the Administration as it is the enabling legislation for the Panama Declaration signed by the U.S. and eleven other countries in 1995. Dr. Elizabeth Edwards of the National Marine Fisheries Service's Southwest Fisheries Center in LaJolla, CA, is expected to testify for NOAA. She is an expert on Eastern Tropical Pacific dolphins.

LATE BREAKING NEWS

HOUSE RESOURCES SUBCOMMITTEE REPORTS OUT CORAL REEFS RESOLUTION

The House Resources Fisheries, Wildlife, and Oceans Subcommittee (Rep. Jim Saxton, R-NJ) unanimously reported out an amended HConRes 8 at a March 19th markup. HConRes 8, expresses the sense of Congress to protect and conserve coral reefs. This resolution expresses Congressional commitment to: promote stewardship of coral reef habitats; encourage research, monitoring, assessment and education about reef ecosystems; and improve the coordination of coral reef activities among federal agencies, academic institutions, nongovernmental organizations and industry. The resolution proposes no changes to existing law. Congressional support for H.Con.Res. 8 is bipartisan. There was no indication when the full Resources Committee would take up the resolution.

ADMINISTRATION REQUESTS FISHERIES WEST COAST FLOODING SUPPLEMENTAL FUNDS

The Clinton Administration has requested \$22.8 million for NOAA to repair Northwest Paciic flood damage that has impaired efforts to restore endangered salmon stocks. The March 19th request was part of a supplemental \$2 billion Fiscal Year FY '97 request for recent natural disasters around the country--including severe winter weather in the West, damaging tornadoes, and March's Midwest flooding. The request includes fish habitat restoration funds to include acquisition of key riparian areas critical to salmon restoration and conservation easements to prevent development in channel mitigation zones. Fish hatcheries will also be repaired in Oregon, Washington State, and Idaho.

LEGISLATIVE HOMEPAGE ON-LINE

The NOAA Legislative Affairs Homepage has already received thousands of inquiries from all over the U.S., Norway, Sweden, Japan, Poland, Germany, the United Kingdom, Egypt, and Pakistan. It includes staff listings with assigned issue areas including Internet E-Mail addresses, schedules of upcoming hearings and markups, official texts of delivered testimonies, transcripts of House and Senate floor debate of critical NOAA authorizing and appropriating legislation, bill status reports, and back issues of the *NOAA Legislative Informer*. It also includes a link to the National Weather Service Homepage. This should be especially helpful for Member and staff domestic and foreign travel.

The Homepage can be accessed at http://www.noaa.gov/noaa-ola

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